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ABSTRACT

This paper proposes a framework for discussing the objectives and content of the next Schools and Staffing Survey (SASS) in school year 1999-2000. The framework focuses on school reform and the information SASS can collect to inform the United States about school reform efforts. Major reform agenda and expert opinion are reviewed, and the issues and topics common to them are identified. These topics are classified under the two major objects of school reform: teacher capacity and school capacity. Teacher capacity is defined in terms of teacher quality, career paths, professional development, and instructional practice. School capacity is defined in terms of school organization and management, decision-making authority, curriculum and instruction, parental involvement, school safety and discipline, and school resources. Part I presents background information about the SASS and its redesign. Part 2 describes the sources of input reviewed for the redesign, and part 3 synthesizes the input around the common issues or topics. Part 4 recommends the organization of these topics under the two major reform headings, and part 5 discusses several issues of survey design and methodology. The appendix contains recommendations of the SASS Redesign Technical Review Panel. Contains a bibliography. (SLD)

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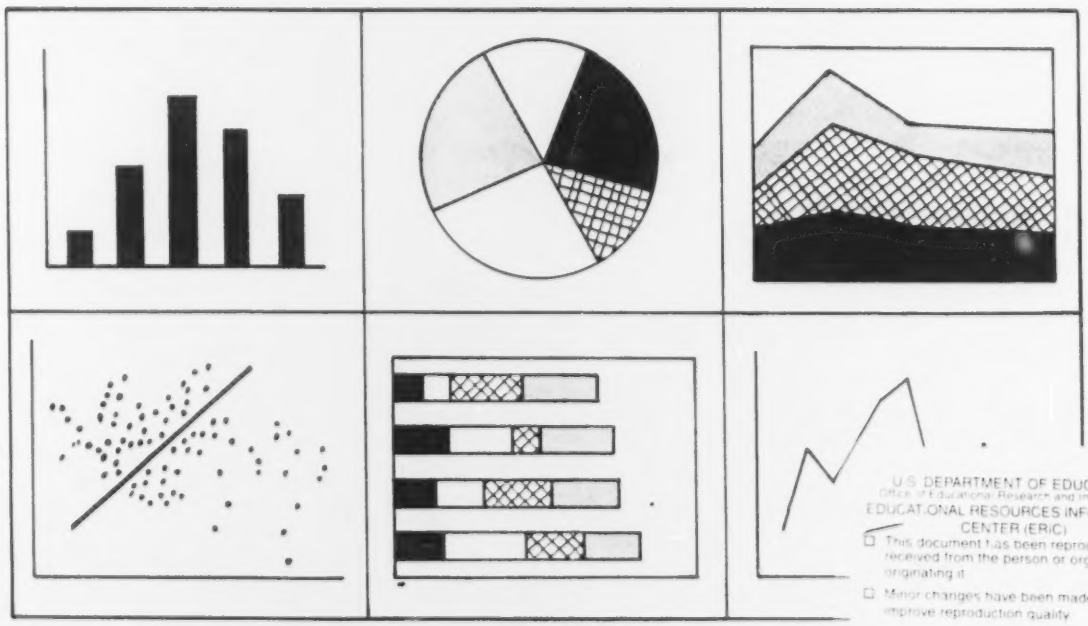
The Redesign of the Schools and Staffing Survey for 1999-2000:

A Position Paper

Working Paper No. 98-08 July 1998



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The Redesign of the Schools and Staffing Survey for 1999-2000:

A Position Paper

Working Paper No. 98-08 July 1998

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July 1998

Foreword

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A Position Paper

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July 1998

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This paper proposes a framework for discussing the objectives and content of the next Schools and Staffing Survey (SASS) in school year 1999-2000. The framework focuses on school reform and what information SASS can collect to inform the nation about school reform efforts. Major reform agenda and expert opinion are reviewed and the issues and topics common to them are identified. These common topics are classified under two major objects of school reform, teacher capacity, and school capacity. Teacher capacity is defined in terms of teacher quality, career paths, professional development, and instructional practice. School capacity is defined in terms of school organization and management, decision-making authority, curriculum and instruction, parental involvement, school safety and discipline, and school resources.

This paper is organized in 5 parts: Part I presents a brief background on SASS and the redesign; II describes the sources of input reviewed for the redesign; III synthesizes the input around common issues or topics; IV recommends the organization of these topics under the reform topics of Teacher Capacity and School Capacity; and V discusses several issues of survey design and methodology. The appendix to the paper contains the December 1997 Recommendations of the SASS Redesign Technical Review Panel.

I. Background of SASS and the Redesign

The Schools and Staffing Survey (SASS) is the only comprehensive source of statistical data on the nation's public and private K-12 education system. It is representative of all elementary and secondary schools, teachers, principals, and public school districts. It is state representative for the public sector and affiliation representative for the private sector. The large sample sizes allow extensive disaggregation of data by important characteristics such as poverty level of schools, urbanicity of districts, and subject field of teachers. A one year longitudinal followup of teachers measures teacher attrition by important characteristics such as age, race/ethnicity and experience, and by teaching fields.

SASS was designed in the mid 1980s in response to the school reform movement of that decade. One of the major issues of that time was teacher supply and demand and how the nation's schools were staffed. Predictions of severe teacher shortages and high rates of teacher attrition were common, brought on by declining enrollments in teacher education and in entry to teaching, and increasing student enrollments. However, data to verify these predictions were lacking. Little was understood about the teacher labor market, the supply sources of teachers, and the conditions under which teachers would choose to enter, remain, or leave teaching. A related concern was the quality of those who entered teaching; the more qualified college graduates, it was argued, were being drawn into alternative occupations (*A Nation at Risk*, U.S. Commission on Excellence in Education 1983). In response to these and related issues, SASS was designed to: (1) measure critical aspects of teacher supply and demand, (2) to profile the teacher and administrator

workforces in terms of qualifications and working conditions, and (3) to monitor basic conditions in schools as workplaces and as learning environments.

Reports on these and a variety of other issues were produced from SASS. As these data became available they played an important role in improving our understanding of teacher supply and demand and the conditions that influence its balance. For the first time, national data were available on turnover in the teacher workforce, including rates of entry into and attrition from teaching, sources and characteristics of newly hired teachers, and characteristics and destinations of leavers. Most important, SASS data revealed the influence of these factors on teacher quality and described in detail the qualifications of teachers to teach their assigned subject areas. These data helped shift the debate from the issue of teacher *quantity* to teacher *quality*; that is, from its focus on teacher shortages measured in terms of the numbers of teaching positions left vacant to the qualifications of teachers who were hired and retained to fill teaching positions.

The six years between the last administration of SASS in 1993-94 and its next administration in 1999–2000 have provided the opportunity to reconsider the objectives of SASS and to revise its content in response to the educational initiatives and policy concerns of the 1990s and the new century (see *An Agenda for Research on Teachers and Schools: Revisiting NCES' Schools and Staffing Survey*, Ingersoll 1995). There is always a tension in statistical agencies between maintaining continuity with past data and providing data on new and emerging issues. The purpose of the SASS redesign is to strike an informed, efficient balance between the two that is responsive to policy and research issues and that also keeps respondent burden at 1993-94 levels or lower[1]. To accomplish this the SASS redesign has involved the wider education research and policy community in the planning process.

II. Sources of Input for the Redesign

This paper is based on review of several sources, primarily a series of commissioned papers, meetings of three expert panels, the National Commission report, *What Matters Most: Teaching for America's Future* (1996); and the President's 1997 Education Initiative as presented in his 1997 State of the Union Address. A summary of each of these sources is presented below.

A. Commissioned Papers

In late 1995 several education researchers and policy experts were commissioned to write papers proposing changes to SASS, both to its substantive content and to its methods. A seminar series on these papers was held in the spring and summer of 1996, with the

[1] Average response time for each component in 1993-94 was 2 hours for the district survey, 1 hour for public and 2 hours for private school survey, ¾ hour for the principal survey, and 1 hour for the teacher survey.

authors presenting their recommendations, outside reviewers commenting on the papers, and discussion among presenters, guests, and NCES staff. The commissioned papers were then reviewed by staff and their recommendations synthesized (*The Schools and Staffing Survey: Recommendations for the Future*, Mullens and Kasprzyk 1997). The following were the topics of the commissioned papers:

School reform
Teacher professional development
Teachers' instructional practices
Technology in instruction
School resources (staffing and finance)
Linking student assessment to SASS

In addition to the above substantive topics, two papers recommended methodological and design changes, one to link SASS to state administrative records to obtain more data without adding burden to schools and districts, and the other to change the sample design to improve estimates of district level variables.

B. The SASS Technical Review Panel

The Technical Review Panel was convened with responsibility for review across all content and design proposals in the SASS redesign. In its first meeting the panel discussed a wide range of topics. There was some agreement that having student assessment data on SASS would increase the relevance of the data set. They questioned the continuing relevance of teacher supply and demand data as measured in past SASS district surveys, and suggested shifting the focus to teacher qualifications and teacher career paths. They reviewed the commissioned papers on staffing resources and on technology in some depth and suggested caution in attempting to measure either in depth through a mail survey such as SASS. The importance of school reform initiatives at both national and state levels was discussed, mostly in terms of federal education programs such as Title 1. The panel emphasized the importance of limiting the content of SASS to 4 or 5 topics that it could measure well and in some depth versus covering many topics superficially, and they raised concerns about the change in periodicity of SASS from a 3- to a 5-year cycle, citing the importance of the timeliness of data for policy purposes.

The Technical Review Panel met again in April 1997 to discuss this position paper and has and will continue to meet throughout the redesign and implementation of the 2000 SASS. The framework presented in section IV has been revised to reflect the recommendations of the Panel in terms of content and emphasis.

C. The Teacher Supply and Demand Panel

The Teacher Supply and Demand Panel was composed of individuals who had served on the original SASS technical review panel, were involved in the design of the original survey, and/or were analysts of SASS teacher supply and demand data. The important

contribution of SASS, as panel members saw it, has been in improving our understanding of teacher supply and demand from what it was a decade ago when the survey was first fielded. The focus of SASS on issues of teacher supply and quality should, they believe, be maintained and enhanced, but with a shift in emphasis from precise estimates of demand and shortage per se (as measured in previous district surveys) to better measures of teacher quality and the processes that affect quality, particularly as teachers move into, through, and out of teaching. Links to student assessment, and other enhancements of SASS, could, they suggested, be accommodated by modifying the current SASS framework.

D. The School Reform Panel

The School Reform Panel was composed of researchers, policy analysts, and administrators involved in school reform at national, state, and local levels. The panel discussed the importance of distinguishing between policy as it is set by state and national entities and as actually implemented in schools and classrooms. They proposed that in measuring school reform SASS should focus on the school and ultimately on the classroom, and how reform affects teachers and teaching practice. Important to this understanding are data on teacher capacity (including teacher quality and professional development) and school capacity (including school as the context and support for instruction and teacher development). They discussed the value of state by state samples and a survey of state level reform policies to track reform from state to district to school.

E. The National Commission on Teaching for America's Future

The National Commission on Teaching for America's Future (the National Commission) used SASS data extensively in portraying teacher quality in the nation and making recommendations for reform. They have proposed expanded indicators of teacher quality and data on teacher recruitment, retention, and dismissal, and the use of these indicators in reporting on state progress in implementing the Commission's recommendations. Their recommendations focus on standards for teacher licensing and certification, improvement of professional development of teachers both pre-service and in-service, support for new teachers, incentives for hiring and retaining quality teachers, and linking student outcomes to teacher accountability.

F. The President's Initiative

The President's Education Initiative had much the same focus on teacher quality as did the National Commission report, particularly regarding the recruitment, retention, and development of quality teachers and the dismissal of poor teachers. Support for teachers' certification by the National Board for Professional Teaching Standards was emphasized, as was instruction in the core subjects, particularly reading in early elementary grades and algebra at the 8th grade. This was the only source reviewed that mentioned school choice, school safety and discipline, and parent involvement as important issues.

G. The Department of Education

The data needs of various programs in the Department of Education are also served by SASS. These include Title I, the Office of Bilingual Education and Minority Language Affairs (OBEMLA), the Office of Indian Education, the Office of Special Education and Rehabilitative Services (OSERS), and the Office of Nonpublic Instruction. Their needs have been addressed through sampling of schools (private, BIA/Tribal) and sampling of teachers (Title I, bilingual/ESL, and special education), as well as through supplemental questions on these programs.

III. Synthesis of Input by Topic

The recommendations from these sources converge on the several topics giving direction to SASS, and diverge on others, raising some issues for further study.

A. Teacher Quality

All sources stressed the importance of measures of teacher quality mostly as defined by licensure or certification and college major or minor in field of teaching assignment – all are measures currently reported by SASS. The National Commission recommended continued measurement of the percent of teachers with substandard licensing by subject field and location as well as percent with and without a major or minor in their teaching field. The Teacher Supply and Demand panel recommended these same measures calculated in terms of the percent of students taught by out of field teachers (as recently reported by SASS), and suggested further that one of the key issues is the distribution of quality teachers across different populations of students and schools.

The question of what constitutes quality teachers and teaching poses a considerable measurement challenge to NCES to go beyond the traditional quality measures of certification and major or minor in assignment (*National Assessments of Teacher Quality*, Ingersoll 1996). The Teacher Supply and Demand panel suggested obtaining teacher SAT or NTE test scores, as well as principals' assessments of what constitutes good teaching and the availability of those characteristics among their teaching staffs. The School Reform Panel discussed teachers' knowledge and skills in their subject fields, measures of quality that would require considerable development. Certification by the National Board for Professional Teaching Standards is perhaps the most direct standard of quality currently available. Measurement of teachers with board certification through a national probability sample like SASS, however, is not feasible until board certification is much more widespread in the teacher workforce. The Teacher Supply and Demand panel suggested waiting until 2005 to sample directly board certified teachers in SASS. In the meantime, the President's focus on National Board certification suggests the importance of tracking the processes in support of teachers seeking board certification.

The Teacher Supply and Demand panel, the National Commission, and the President's Initiative all suggested tracking the processes in place in states, districts, and schools that are designed to improve teacher quality and accountability. The National Commission suggested measures of the extent to which teacher evaluations are tied to evidence of knowledge and skills, and to professional development. The President's initiative stressed the importance of procedures and incentives for recruiting, retaining, and rewarding quality teachers, and for dismissal of incompetent teachers. The Teacher Supply and Demand Panel also stressed the importance of hiring criteria, and the processes of recruitment and placement of teachers. In addition they suggested tracking the long term effect of these processes on teacher quality by comparing the quality of teachers who enter, who stay, who are dismissed, and who leave voluntarily.

Two panels discussed the issue of teacher supply and demand as related to teacher quality. The Teacher Supply and Demand panel and the Technical Review Panel concurred that there should be a shift in SASS emphasis from measures of demand and shortage per se to more and better measures of teacher quality, especially as related to the career status of teachers (whether new entrants, reentrants, mid career, pre-retirement). Precise measures of demand and shortage have been a staple of SASS district level data since its origin, but these rates of teacher shortage have been consistently very low and unchanging over three administrations of the survey, and have not provided much insight into the problem. SASS analyses of teacher qualifications, on the other hand, have demonstrated how imbalances in supply and demand conditions are often reconciled through adjustments in teacher quality (Rollefson and Broughman 1995; Ingersoll 1995), giving new definition to the term teacher shortage. Recognizing the contribution of SASS to improved understanding of these processes, both panels recommended better measurement of teacher quality as it is mediated at the school level through decisions regarding teacher hiring, teacher assignments, changes in class size, and other ways in which schools influence and respond to the available supply of teachers, often with consequences for quality. The Technical Review Panel also stressed the importance of knowing how schools deal with enrollment increases and demand for new teacher hires.

B. Teacher Career Paths

The National Commission report, with its projections of the increased demand for teachers in the next decade, focused attention on teacher supply and related quality issues. They recommended tracking routes into teaching and the qualifications of those who enter from various sources and particularly those who come from other careers and through alternative certification programs. Similarly, the Teacher Supply and Demand Panel suggests tracking new teacher hires by source and teacher retirements in terms of effects of this turnover on quality of the teacher workforce. Both groups stressed the importance of data on teacher recruitment, induction, retention, mobility and attrition, as did the President's Initiative. All three stressed the importance of information on the use of incentives for hiring qualified licensed teachers, rewarding good teaching, and procedures for dismissal of poor teachers. In addition, the National Commission

recommended additional data on incentives for teaching in shortage fields, National Board certification, and professional development that improves teaching quality.

C. Teacher Professional Development

Teacher professional development is ultimately related to teacher quality, improvement in teacher knowledge, skills, and practice. The sources identified two aspects of professional development that are important to measure: one is teachers' participation in professional development activities, both formal and informal; and the other is the processes and support systems provided by schools and districts for teachers' professional development. At the teacher level, the Technical Review Panel and National Commission both stressed the less formal aspects of professional development: teachers' engagement in collaborative and individual planning, peer coaching, teacher initiated research and school problem solving, and mentoring of new teachers, in addition to more formal in-service programs. With regard to the formal professional development activities, the School Reform Panel stressed that the knowledge and skill that teachers bring to the training is important in determining their need for training and benefits from it.

At the school and district levels, the panels focused on the processes and policies that support both informal and formal professional development, such as incentives, time in the schedule for such activities, mentoring programs, and other induction activities to support new teachers. The National Commission recommended data on district use of standards in shaping professional development programs, and, along with the President's initiative, incentives and support for teachers to seek National Board certification.

D. Instructional Practices

The position of the School Reform Panel was that classroom instructional practice is the key to school reform, that the real measure of reform is in how it affects teaching and learning in the classroom. Important aspects of instructional practice that were discussed were use of time, teaching methods, use of materials including technology, assessment, and the teachers' knowledge and use of standards, both content and pedagogical. The Teacher Supply and Demand Panel also mentioned the importance of tracking the standards movement among teachers in their classroom practices in terms of their knowledge and use of curriculum and performance standards.

The focus on teacher instructional practices raises the issue of which subjects should be measured and at which grade levels, since many instructional practices and most assessments are specific to subject and grade. The School Reform Panel focused on math and science, the gatekeeper courses, but also expressed concern that the focus of data collection may become the focus of reform efforts, leaving other subjects such as reading and language arts unattended. The President's initiative emphasizes the strengthening of reading instruction in elementary grades, algebra in the 8th grade, and the setting of standards by schools in core subjects.

At the school level, the Technical Review Panel discussed this in terms of the availability of various curricula to different populations of students, including those in poverty, and particularly access to "gateway" courses in mathematics and sciences that are important for postsecondary education.

E. Technology

All sources of input acknowledge the importance of technology in education, particularly as a tool in classroom instruction. The President's initiative stressed the importance of Internet access in all classrooms and providing training for teachers for its use in instruction. The National Commission likewise stressed the importance of training of administrators and teachers in integration of new technologies in instruction. The Technical Review Panel, which focused on this topic in its first meeting, recognized the timeliness of the issue but warned about the difficulty of designing questions in 1997 that would still be relevant in 2001 when 1999-2000 SASS data become available. They suggested limiting the information captured in SASS to basics that will stand the test of time, and using the quicker turnaround FRSS surveys for more detailed and timely information on technology. The consensus of the panels was that, regardless of its level of detail, the focus in SASS should be on its use as an instructional material or tool and on the professional development of teachers related to technology rather than on an accounting of the numbers and types of technology available in schools.

F. School Organization, Authority, and Decision Making

Several school reform initiatives have as their objective the shifting of resources, authority, and management responsibility from state and district levels to the school. School based management, it is argued, increases each school's ability to meet the needs of its teachers, students, and parents as best understood at the school level. The extent to which schools are given and exercise this authority and how they organize for these responsibilities are important aspects of school reform. Whether and how schools provide support to teachers, deliver curricula and instruction, engage their staffs in school problem solving, and make instructional and other policy decisions describe the implementation of school reform efforts (Baker 1996).

G. School (Staffing) Resources

The National Commission cited the increased concentration of staffing resources more directly in schools and classrooms as an important movement in school reform. They proposed several indicators related to school resources, including percent of budget allocated to teaching versus other staff, and the percent spent on teacher salaries, pensions and other fringe benefits, professional development, technology, and classroom instruction. The School Reform Panel listed school finance and its equitable distribution as an important element in school reform. The Technical Review Panel, which discussed a proposal on this topic in some depth at its first meeting, raised questions about th-

feasibility of collecting detailed financial data in a mail survey, but agreed that data on staffing resources at the school level were valuable even without dollar amounts attached.

H. Student Assessment

Almost invariably any group that is convened to discuss the utility of SASS recommends the addition of a student assessment measure, arguing that the student outcomes are the critical missing data in a survey rich in inputs and process data. Student achievement, the "ultimate dependent variable", tells us why the other SASS data are important (Technical Review Panel). The National Commission suggested data on student performance in relation to teacher quality as an indicator of improving teacher quality. The School Reform Panel and Teacher Supply and Demand panel both suggest caution in the addition of assessment data because of the erroneous conclusions that will likely be drawn about what predicts achievement when there are not data available to statistically control for preexisting differences and other factors that explain achievement results. For this reason the School Reform Panel took the position that achievement scores aggregated at the school level would be of value but only if restricted to use as an independent variable, never as a dependent variable. Such a restriction, however, is unlikely to be upheld by data users. To overcome this limitation, the Teacher Supply and Demand panel proposed a pre- post-test model to control for preexisting differences in student achievement that would otherwise be attributed to schooling effects. To control even further, they suggested the addition of parent background data and collecting achievement data in the elementary grades where achievement differences between students first emerge, and where there is less confounding of effects. Overall, there was some agreement that it would be worthwhile to include student assessment data, that its use should be carefully considered, and that readily available school level scores that did not require testing a separate SASS student sample would be sufficient.

The need for other student outcomes besides achievement was identified by several sources. The Technical Review Panel suggested measures of rates of chronic student absenteeism. The School Reform Panel mentioned dropout rates and college application rates at the school level, and the President's initiative suggested the importance of tracking 2- versus 4-year college application rates and other indicators of students' preparation for and access to postsecondary education.

I. Parental Involvement and School Safety and Discipline

The President's initiative mentioned two other topics, both the subject of National Education Goals. One was parental involvement including school choice, and the other was school safety and discipline, including enforcement of discipline codes, and teacher training to deal with discipline and violence.

IV. Recommended Framework for the Redesign of SASS

The topics discussed in the previous section can be grouped under the broader topics of teacher capacity and school capacity. These provide a useful organizing framework as they are the major objects of most school reform initiatives, and describe dimensions along which school reform efforts can be monitored. This framework was recommended by the Technical Review Panel in its April 1997 meeting.

A. Teacher Capacity

Teacher capacity is defined by 4 dimensions, each with its parallel in school capacity, as follows:

1. Teacher quality – The Teacher Supply and Demand Panel and the Technical Review Panel concurred that SASS should shift its focus *from teacher quantity* issues (demand and shortage) *to teacher quality* in terms of:

- prerequisite qualifications – licensure, academic preparation (major or minor in teaching field), and experience
- teachers' perceptions of the quality of their preparation to teach
- external assessments of quality – principals' assessments of teaching staff, teachers' assessment of teacher colleagues
- teacher commitment

School capacity – the processes in schools and districts that influence teacher quality:

- standards for hiring, placement, and dismissal of teachers
- rewards and incentives for good teaching, growth

2. Teacher career paths – The transitions and stages that define teacher careers, specifically:

- entry into teaching, with emphasis on induction of new teachers
- retention, transfers (between schools and subject fields), and reentries, and
- exits (retirements and other attrition) from teaching

School capacity – the policies and conditions influencing teachers' career decisions, and their effect on teacher and school quality:

- teaching conditions, rewards, remuneration
- school adjustments to teacher vacancies

3. Teacher professional development – The professional development activities and experiences of teachers, both pre-service and in-service, formal and informal, to capture:

- needs for teacher improvement (individual and collegial) and needs for school improvement
- topics and structure of professional development at both school and district levels

School capacity – the policies and practices in schools and districts in support of teachers' professional development, such as structured time for professional development.

4. ***Teacher instructional practice*** – A critical dimension of the redesign, including:
   - classroom conditions and structure
   - course content and emphasis, including curriculum standards
   - instructional methods and activities, including pedagogical standards
   - instructional resources, including technology

School capacity – curriculum and instruction are discussed below under school capacity.

A Note about Technology – The Technical Review Panel recommended that technology be excluded as a discrete dimension of teacher or school capacity; and that rather it be addressed with a few items under the dimensions of professional development, instructional practice, and organization and management. Given the rapid changes in technology the Panel thinks that a smaller standalone survey is a better vehicle for collecting detailed data on availability and access of technology.

B. School Capacity

In addition to the dimensions of school capacity described above, are the following:

1. School organization and management/decision making – The structures and processes involved in decision making within and between district and the school, and the content of the decisions:
   - processes – how decisions are made, degree of authority and autonomy at school level, and within school among administrators and teachers
   - content – relates to dimensions of teacher and school capacity; e.g., teacher hiring, professional development, curricular tracking, discipline, school improvement

2. Curriculum & instruction – The curricular program and services offered by schools, and the ways in which the school organizes to provide instruction:
   - curricular offerings – gateway courses, core subjects, adoption of standards
   - instructional support – including services for special populations (e.g., diagnostic services)
   - instructional organization and practices – tracking, scheduling, teams

3. ***Parental involvement*** – A select number of items on exemplary practices in:
   - encouraging parental involvement in schools
   - support for parenting skills related to education

4. ***School safety and discipline*** – A select number of items focused on:
   - principals' and teachers' views (composite measures of each)
   - behavioral measures of school problems (e.g., rates of chronic student absenteeism, incidence of problems)

The topics in the framework above are those on which there is agreement among members of the TRP. Items on each of these topics have been developed and will be field tested in preparation for the 1999-2000 SASS. In tables A and B on the following pages, data elements representing each of the items are listed according to broader topic and the survey respondent from which they will be collected. Table A (pp. 12-15) shows the data elements measuring each of the topics under teacher capacity and table B (pp. 16-18) shows the data elements measuring each topic under school capacity. Each data element is marked to indicate whether it is an old or a revised SASS item (from the 1993-94 Survey), or a new item.

A. Teacher Capacity: Teacher Quality

• Old Item ⇒ New Item ⊗ Revised Item	Teacher Survey	School Survey	Principal Survey	District Survey
MAJOR TOPICS				
Basic Qualifications	• Degrees in major/minor fields; • Teaching assignment fields and type of certification in each; • Years of teaching experience; • Name of undergraduate institution.			• Hiring criteria; ⊗ Incentives and support of NBPTS certification; ⇒ Rewards for good teaching.
Quality Assessments	⇒Teacher's assessment of quality of teaching staff.		⇒ Principal's assessments of quality of teaching staff.	
Teacher Commitment	• Commitment; • Scale based on attitudinal items.			

A. Teacher Capacity: Teacher Career Paths and Related Supply Issues

• Old Item ⇒ New Item ⊗ Revised Item	Teacher Survey	School Survey	Principal Survey	District Survey	Teacher Follow-Up Survey
MAJOR TOPICS					
Recruitment and Hiring	• Salary by source; • Benefits.	• Difficulty and methods of filling vacancies.		• Incentives for shortage fields; • Salary; • Retraining for shortage fields; ⇒ Responsibility for hiring processes; ⇒ Timeliness of job offers.	
Entry into Teaching	• Routes of entry to teaching; • Prior occupation.				
Teacher Preparation	⇒ How teaching certificate was acquired; ⇒ Teacher training characteristics; ⇒ Perception of teacher training; ⇒ Length of practice teaching.				
Induction	• Induction experience, master or mentor; ⇒ Types of support for 1st year teachers; ⇒ 1st year responsibilities; ⇒ Ratings of mentor qualities.	⇒ Support for new teachers.			
Exits	• Retirement plans.			⇒ Dismissal procedures; ⇒ Barriers to dismissal.	• Attrition rates by experience, field; demographics; • Reasons for attrition; • Destinations; • Transfer rates.

A. Teacher Capacity: Teacher Professional Development

• Old Item ⇒ New Item ⊗ Revised Item	Teacher Survey	School Survey	Principal Survey	District Survey
MAJOR TOPICS				
Design	⇒ Characteristics of activities; ⊗ Teacher influence on content.	⇒ Decisionmaking; ⇒ Schoolwide and individual planning.	⊗ Influence on decisionmaking; ⇒ Influence on content; ⇒ Characteristics of activities.	⇒ Decisionmaking process; ⇒ Planning requirements; ⇒ Planning process.
Delivery	⊗ Sponsorship of activities; ⊗ Hours attended; ⇒ Frequency of planning meetings.		⇒ Evaluation of professional development.	
Content	⊗ Topics covered.		⇒ Principal's own participation.	
Context	⊗ Institutional support received; ⇒ Institutional requirements to participate; ⇒ Personal expenditures.	⇒ Provision of time for PD; ⇒ Methods of providing time for PD.	⇒ Principal activities; ⇒ Instructional leadership.	⇒ Sources of funding.
Outcomes	⊗ Impact of PD.			

A. Teacher Capacity: Teacher Instructional Practices

• Old Item ⇒ New Item ⊗ Revised Item	Teacher Survey	School Survey	Principal Survey	District Survey
MAJOR TOPICS				
Teaching and Learning Conditions of the School and Classroom	⇒ Course title; ⇒ Course schedule; ⇒ Student grade levels; ⇒ Student ability levels; ⇒ Class ability level.			
Course Content and Emphasis	⇒ Course content and emphasis; ⇒ Student learning objectives; ⇒ Assessment content.			
Classroom Instructional Practices	⇒ Teacher instructional activities; ⇒ Student classroom activities; ⇒ Non-academic time.			
Instructional Materials	⇒ Instructional materials used by students.			

B. School Capacity: Organization and Management

• Old Item ⇒ New Item ⊗ Revised Item	Teacher Survey	School Survey	Principal Survey	District Survey
MAJOR TOPICS				
Content	⊗ How classes are organized: add inclusion teaching; ⊗ Students and hours taught: add inclusion teaching; ⇒ Role of classroom aide.	⊗ Type of school: add detail on alternative school options; ⊗ Admission criteria: add criteria; prioritize relative importance; ⇒ Organizing grades and groups; ⇒ Flexible scheduling and year-round schools.	No items on reform topics in this subarea.	⊗ Choice programs and enrollments: add vouchers, charters, home schooling; standards; ⇒ Management training; ⇒ Top management training.

B. School Capacity: School Decision-Making

• Old Item ⇒ New Item ⊗ Revised Item	Teacher Survey	School Survey	Principal Survey	District Survey
MAJOR TOPICS				
Processes	⊗ Teacher influence on policy: add final authority attribution; ⊗ Teacher control in classroom: add standards; ⊗ Teacher perceptions: add job security, support, and knowledge.	No new reform items.	⊗ Policy influence: add new influence groups: superintendent, site councils and advisory groups; ⊗ Policy influence: add Final authority of key influence groups; ⇒ Rewards and sanctions.	⇒ Data-based decisionmaking; ⇒ Rewards and sanctions.
Content	⇒ Data-based instructional planning.			

B. School Capacity: Curriculum & Instruction

• Old Item ⇒ New Item ⊗ Revised Item	Teacher Survey	School Survey	Principal Survey	District Survey
MAJOR TOPICS				
Curricular Offerings	⇒ Establishing standards; ⇒ Academic connections to work-based learning.	• K-program; • PK-program; • Student programs/ services and enrollments; • Title 1 students and teachers; ⇒ Promoting students.		• Programs and services for preschool children.
Instructional Support	⇒ Adopted standards-based teaching strategies.	⇒ Inclusion of special education students; ⇒ Work-based learning opportunities.	⊗ Importance of various goals: Add: All students achieve standards.	
Instructional Org. and Practices	• Time teaching core subjects in elementary grades; • Departmental instruction: subjects, class size; • Use of time in school week; • Title 1 teachers.	• Enrollments; ⇒ Tracking.		⊗ Graduation requirements: add detail on standards-based requirements for alternative diplomas.
Outcomes –		⇒ Graduation rates; ⇒ Percentage chronically absent.		

B. School Capacity: Parental Involvement

• Old Item ⇒ New Item ⊗ Revised Item from FRSS	Teacher Survey	School Survey	Principal Survey	District Survey
MAJOR TOPICS				
Encouraging PI	• Perceived support from parents	• School councils; ⊗ Activities held by school; ⊗ Information sent to parents; ⊗ Forms of communication between parents and staff; ⊗ Services to LEP parents; ⊗ Extent of parental input.		

B. School Capacity: School Safety and Discipline

• Old Item ⇒ New Item ⊗ Revised Item	Teacher Survey	School Survey	Principal Survey	District Survey
MAJOR TOPICS				
Perceptions	• Perceived school problems.		⇒ Perceived school problems.	
Behavioral Measures	• Tardiness problem; • Rate of threats and injury.	• Student absence rate; • Teacher absence rate; • Drug and alcohol programs; ⇒ Security measures.	⊗ Program on drugs, alcohol and/or tobacco; ⊗ Program on violence prevention; ⇒ Security measures.	

C. Remaining Topics and Issues

In addition to the topics displayed in tables A and B, there are other topics related to the content and design of SASS that have been considered in the redesign but on which there are outstanding issues that need to be resolved. Each of these is discussed below.

*1. **School resources*** – The equitable distribution of resources *at the school level* is a topic on several reform agenda. Two approaches to measuring resources at the school level are currently being considered, one based on a standard fiscal accounting of expenditures, the other based on staffing resources by program area as a cost estimation procedure. The two will be examined in terms of the basic resource questions to be addressed in SASS, the feasibility and respondent burden of each, and the possibility of a combined fiscal-cost accounting approach. In 1998 a technical working group of fiscal experts will be convened to review and comment on these alternative approaches.

*2. **Student assessment*** – In considering a student assessment measure in SASS, the Technical Review Panel raised two concerns: One was the limitations of the SASS cross sectional design for a data set that, because it links school resource and process variables to student outcomes, will inevitably be used for drawing (inappropriate) causal inferences. Second is the cost of sampling and testing students – a cost that the TRP recommended not be incurred. Instead, they suggested that SASS explore options that would link extant assessment data at the school level to schools in the SASS sample. Five options are currently being considered. Options a-c below address the second concern proposing the use of extant achievement data, but do not control for the first concern about inappropriate causal inference. Options d and e address both concerns.

a) Link state assessment data at the school level (school means or percentile distributions) to SASS sample schools and restrict analysis to within state. A task order contract is assessing the feasibility of obtaining and matching state assessment data to SASS schools.

b) Adjust state assessments to a common metric through NAEP – This option is being developed under an NCES task order contract, using state assessments in a number of states, and standardizing these scores through state NAEP test data. This common metric would make different assessment instruments used by different states comparable for national research and policy analysis purposes. The validity of these adjusted scores is being tested by comparing them against known relationships between NAEP scores and other variables.

c) Link the National Reading and Mathematics Tests being developed by OERI to SASS in states participating in the tests.

d) Link state assessments at the school level in those select states that have developed sophisticated approaches to measuring school performance and change in performance through pre and post test designs (e.g., Kentucky, Maryland). Use as a

research data base to explore relationships between school and teacher variables and student achievement.

e) Explore the possibility of embedding SASS items/instruments in the new Early Childhood Longitudinal Survey, the new National Educational Longitudinal Survey, both of which have a student achievement component. Use as a research data base as in d above.

3. Principal Characteristics – The SASS Principal Survey has traditionally paralleled the Teacher Survey in collecting data on principals' qualifications (degrees and majors or minors, special administrative training), prior experience, salary and benefits, and demographic characteristics. These topics, however, did not appear in the reform agendas reviewed nor in the deliberations of the TRP, and thus are not included in their previous detail in the new SASS framework. Instead the TRP recommended that basic data on principal characteristics be collected and that the role of the principal in school reform be measured. Other than this information, the focus of the Principal Survey will be on that information *about the school* for which the principal is the best informant.

4. The District Survey – There is a question of whether there is need for data *about districts themselves*, as opposed to data *from districts* about the schools and teachers in the sample. In past administrations of SASS the assumption was that data *about districts* would be reported, and therefore a number of items were included on the district survey to classify districts by grade span, enrollment size, size of teacher force, race/ethnic distribution of students, and race/ethnic distribution of teachers. Most of these items are unnecessary if the purpose of the district survey is to report data about the schools in the district rather than the districts themselves. These data are appropriately collected at the district level because they concerns district policies, programs, operations, or other data that are more accessible at the district than at the school. As with the Principal Survey, the purpose and content of the District Survey need further discussion. With the focus of reform on the school level, should the purpose of the district survey shift to being simply an information source on the school? Or should data from districts be reported by district characteristics?

V. Issues of Survey Design and Methodology

In the discussions of the content of the next SASS a number of issues of survey design and methodology arose. Papers and memoranda have been written on a number of them and are cited. These issues, for the most part, have been resolved as recommended by the SASS Technical Review Panel (see appendix A). The issue of periodicity, however, remains unresolved.

Longitudinal design – To improve estimates of change over time SASS has included a 30 percent overlapping sample of schools between 1988 and 1991, and between 1991 and

1994. The School Reform Panel suggested that using such an overlapping sample to study schools longitudinally would enhance understanding of the implementation of school reform. There are two major issues: one is the cost of collecting longitudinal information in terms of the displacement of cross-sectional item content, and the other is the value added from a longitudinal measure of change over time above change measured in repeated cross-sectional surveys. A paper examining a longitudinal sample in SASS in terms of design and content issues is *A Feasibility Study of Longitudinal Design for Schools and Staffing Survey* (Baker 1998). An analysis of data from the overlapping sample of schools in the 1991 and 1994 SASS is *A Longitudinal Study of School Organization: An Exploratory Analysis of SASS Data* (Baker 1997).

State by State samples – One of the unique characteristics of SASS is its state level sample design, providing reliable and comparable estimates of many SASS data elements at the state level. The 3 review panels agree that SASS state level estimates may be especially important for tracking school reform and other policies that are often the initiative of states and vary by state. The National Commission has used state level data to monitor teacher quality and proposes continued use of state level data to track implementation of their recommendations. State data are also used for reporting on the National Education Goals. The additional sample required to move from national to state by state estimates increases the cost of SASS considerably, but the larger sample size also makes it possible to obtain national level estimates of teachers by subject fields and to obtain good measures of teacher attrition (a large base year sample is required in order to capture enough teachers who leave the profession the following year). Alternatives to state level SASS, such as alternating state and national only sample designs in every other SASS have been proposed, together with consideration of alternative periodicities. The issue is whether the additional cost of state level estimates with every administration of SASS is worth the benefits in data and information. A paper reviewing the issues and options is *The State by State Component of SASS: Issues for the Redesign* (Baker 1997).

Private school sample – The SASS private school sample is the only national sample of private K-12 education, providing data that are comparable to public sector data on the full range of SASS topics. The Teacher Supply and Demand panel highlighted its importance as school reform policies attempt to emulate private school governance and conditions. Inconsistencies in state and local regulation of teacher certification and teacher salaries, for example, provide useful data for analyzing the effects of these regulations on teacher quality, attrition, mobility (*Teacher Pay and Teacher Quality*, Ballou and Podursky 1997). Analogous to the state by state samples in the public sector are the affiliation level samples for private schools. A paper on the issues and options is *The Private School Component of SASS: Issues for Redesign*; (Baker 1997).

Indian school sample – In both 1991 and 1994, SASS included a supplemental sample of BIA/Tribal schools (including teachers and principals) and of public schools that serve large enrollments of Native American students in order to report to the Office of Indian Education and the Bureau of Indian Affairs on the condition of Indian education in the nation (*Characteristics of American Indian and Alaska Native Education*, Pavel and

Curtin 1997; Pavel, Curtin, Christenson, Rudes, Whitener 1995). This is the only nationally representative data on Indian K-12 education and provides data that are comparable to public and private schools. The supplemental sample of BIA/Tribal schools was paid for by outside funds.

Periodicity of SASS – As SASS data on teacher quality are more widely used (the National Commission Report, the Education Week report, *Quality Counts*), demand for SASS data have increased. At the same time that demand for the data has been increasing, SASS has been changed from a 3- to a 5-year cycle. The Technical Review Panel expressed concern that with this change the utility of the data decrease; that the old data are out of date well before the new increasingly important data are available. Some alternatives to periodicity of SASS, combined with alternative national versus state and affiliation level samples, are being studied (Smith, Ghosh, and Chang 1997).

Teacher sample – Several of the substantive proposals discussed above have implications for teacher sampling in SASS. The Teacher Supply and Demand panel suggests oversampling both new and experienced teachers (i.e.; those close to retirement); new teachers to better track entrance, induction and early attrition, and experienced teachers to better track the aging teaching force as it moves into retirement. These are issues that are important to the National Commission and the President's initiative as well. The School Reform Panel suggested larger teacher samples in each school to provide more reliable estimates of teacher characteristics (practices, quality) at the school level. This panel's focus on teachers of selected subjects and grade levels has implications for teacher sampling.

In addition, SASS has traditionally oversampled the following groups of teachers:

1. teachers in their first 3 years of teaching in order to have sufficient sample size for measuring teacher attrition among new teachers through the Teacher Followup Survey;
2. teachers of limited English proficient students (ESL/bilingual teachers) in order to provide national estimates of LEP teachers for the Office of Bilingual Education and Minority Language Affairs; and
3. Hispanic, Native American, and Asian/Pacific Islander teachers to provide national estimates of those groups.

Stratification of the teacher sample by specific subjects and other race/ethnicities currently provides sufficient samples for national estimates without oversampling. Requests for estimates of other types of teachers beyond what is currently provided will come at additional cost either in increased sample size or less precision of estimates.

The use of video taping – The SASS staff have been asked by the Commissioner of NCES to explore the use of TIMSS type videotaping in the next SASS. The School Reform Panel suggested videos to measure teacher instructional practices and/or to validate mail survey questions on teacher instructional practices. The Teacher Supply and Demand panel saw video as a possible means of studying the quality of teacher

practice, or as a means of promoting use of SASS data to policy makers through videos depicting survey results. They viewed video as a flexible source of data on teachers, amenable to ex post coding according to any number of protocols. Some panel members expressed reservations about the use of video because of its considerable cost and especially without student outcome data as a criterion measure.

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Appendix A

Recommendations of the SASS Redesign Technical Review Panel
December 1997

The Technical Review Panel (TRP) for the redesign of the Schools and Staffing Survey (SASS) was asked to review several issues related to the design and content of SASS and comment to the National Center for Education Statistics (NCES). These issues include possible changes in the content, sample, and periodicity of the survey; incorporating instructional practice questions; the feasibility of linking state assessment data to SASS; piloting classroom videos; and collecting school-level resource data.

After a careful review of background materials prepared by NCES and ESSI staff and discussion and debate during the summer and fall of 1997, the TRP makes the following recommendations concerning the design and content of future Schools and Staffing Surveys:

I. The design of SASS

A. The TRP recommends that NCES:

1. Retain the current structure of SASS, including the state-by-state sample design and the Teacher Followup Survey (TFS).

2. Reduce the periodicity to no more than every four years. The Panel was very concerned that the current shift from a three-year to a five-year cycle undermines the usefulness of the SASS data to both policymakers and researchers and will erode their support of this survey. Even with four years between data collections, there will be times during that cycle when the most recent available data are five to six years old--too dated to be taken seriously by policymakers. In their 1996 report, for example, the National Commission on Teaching and America's Future discovered that their use of five-year old data was uniformly questioned by governors and legislators.

3. Merge the School and Principal Questionnaires. NCES should limit background information on the principal to basic demographic characteristics (e g., age, race/ethnicity, gender, years in the school), and ask the principal questions about school governance and practice.

4. Link state assessment data to the SASS file, standardizing scores across states using the NAEP metric, if further study shows that this linkage is feasible and adds value to SASS. (See additional comments on this issue below.)

5. Continue further development work on the collection of resource allocation data and the development of classroom videos, but not at the expense of eliminating the TFS or reducing the scope of SASS. (See additional comments on the development of videos below.)

B. The TRP considered, and rejected, the following changes to the SASS design:

1. Moving from a state-by-state to a national sample design. Although a national design would enable NCES to collect data on a more frequent basis, the TRP identified six reasons for not making this change.

   a. The state is a major reform arena, and SASS is the only source of state-by-state information on schools.

   b. State policymakers use the SASS data, and through this use have become major advocates of this survey. State-level SASS data are also used in research and reports by national groups, such as the National Education Goals Panel, the Council of Chief State School Officers, *Quality Counts* published by *Education Week*, the Southern Regional Education Board, and the National Commission on Teaching and America's Future.

   c. Moving to a national sample would considerably reduce the number of schools and teachers included in the survey. This reduced sample would limit the numbers and kinds of analyses that could be conducted, such as studying teacher career paths. In addition, the smaller sample size would render the Teacher Followup Survey infeasible because a large sample is needed to obtain a minimally adequate sample of teachers who leave the profession.

   d. If NCES drops the state-by-state sample, it can not link existing student achievement data to SASS.

   e. National estimates of reform are available from other sources such as the NEA Status of the American Public School Teacher and periodic polls of teachers by Metropolitan Life and Lou Harris.

   f. The benefits of a state-by-state design considerably outweigh the additional cost of this design (about 1/3 more than a national sample).

2. Switching from the current repeated cross-sectional design to a full longitudinal design. The TRP did not see any advantages to this change. If NCES continues to include an overlapping sample of schools for estimation purposes, analysts can conduct longitudinal studies of this reduced panel. The TRP identified four reasons for not supporting a longitudinal design.

   a. Simple trends can be reported using the existing cross-sectional design.

   b. A longitudinal design would require a reworking of items to capture change over time, displacing some cross-sectional items.

   c. A longitudinal design would increase respondent burden.

   d. NCES has not identified a set of research questions that are uniquely answered by a longitudinal design.

3. Reducing the number of private school categories from the current 18 to 9 or fewer. The TRP did not see any advantage to changing the current number of affiliation groups. As the only national database on private schools, it is important to keep a large number of categories in SASS to reflect the growing diversity of the private school sector. The Panel felt that the benefits of having a larger set of categories outweigh the relatively small cost savings of reducing the private school sample size to only that which is needed for nine or fewer private school categories.

II. The content of SASS

The TRP recommends keeping the major areas and topics of the new SASS framework and makes the following suggestions concerning the content of these areas:

A. Teacher Capacity

1. Teacher Quality

   a. Keep the recommended set of questions on teacher qualifications, but review the questions on degrees to determine if that amount of detail is necessary.

   b. Drop the quality assessment item from the Teacher Questionnaire and develop an item for the Principal Questionnaire that is a valid measure of teacher quality.

   c. To measure teacher commitment, keep item #48, reduce item #47 based on scaling, and revisit using items #51b and #52 as predictors of teacher turnover.

2. Teacher Career Paths

   a. Keep all five topic areas, but use the TFS to study teacher career path transitions from one year to the next (other than entering or reentering teaching). These include school transfer, teaching field transfer, and attrition.

   b. Keep the salary information collected on the Teacher Questionnaire as a variable used in basic analyses of the SASS data. These salary data are also needed for the resource study.

3. Professional Development

   a. Give lowest priority to collecting information on the design of professional development.

   b. Move the computer coordinator item to the School Survey.

   c. Wait for fieldtesting of the other items and item-level input from Panel members.

4. Instructional Practices

   a. Put a set of generic instructional practice questions on all teacher questionnaires (taking no longer than 15 minutes), and treat subject-specific questions as an increment (e.g.) for grade 8-12 math teachers.

   b. Drop the proposed item on the availability of instructional materials and develop one or two generic questions on the use of computers in instruction to be asked of all teachers.

   c. Await fieldtest results on the other items.

   d. The Panel was concerned about the lack of items on topic coverage in the module on mathematics instructional practices. These items had been dropped because of problems uncovered during the field test. The Panel suggested revisiting the inclusion of content/topic questions.

B. School Capacity

1. Move as much as possible from the Teacher to the Principal/School Survey.

2. Reduce the length of "perception" questions through scaling.

3. Retain information on school and classroom structures and organization.

4. Add questions on curriculum and instruction.

5. Limit questions on parental involvement and school safety and discipline to information needed by the National Education Goals Panel.

III. Linking state assessment data to SASS

The TRP recommends that NCES not add a student testing component directly to SASS, but investigate linking state assessment data to SASS, using the NAEP metric as a way of standardizing scores across states. The TRP also raised a number of cautions about using assessment scores as a dependent variable in analyses using SASS data.

After hearing and discussing Don McLaughlin's presentation on his pilot study of the feasibility of adding school-level state assessment data to the SASS database, the TRP recommends continuing this line of inquiry with the following caveats:

A. Existing student/family background data are inadequate to control for the effects of these characteristics on student achievement.

B. The data can not be used to draw causal relationships.

C. There is a need to develop more sophisticated models relating student and school variables to student achievement.

D. Many states will have changed their assessments by 1999, moving away from competency-based, norm-referenced tests to formats and constructs that are more closely aligned to NAEP.

E. SASS data should be used to develop state-level models (but standardized using NAEP), rather than a national model.

F. Use student assessment scores as an independent variable as well as a dependent variable.

The TRP also raises the following questions concerning the assessment data: What is the product? How will the data be shared? Who will use it? How will the data be used by the research and policy communities and by the public?

IV. Classroom video and school finance pilots

The TRP recommends that NCES seek resources in addition to those currently allocated to SASS that would support the further development of the classroom video and school finance pilot projects. Regarding the video pilot, the Panel makes the following suggestions and raises the following issues:

A. The development of the classroom videos should be pursued collaboratively with TIMSS. As NCES plans for the 1999 TIMSS, it should explore (1) overlapping SASS and TIMSS samples in two consecutive years, and (2) incorporating SASS items in the questionnaires given to schools in the US.

B. The next ESSI paper on the video project should discuss the potential of this collaboration and identify research questions that could be addressed by adding a video component to SASS.

C. With SASS, NCES will not be able to link teacher practice in one classroom, as captured on a video, to student achievement for that classroom, since the student achievement measure envisioned in the SASS-state assessment linkage study attached to SASS will be an average for the school.

D. A value of both the TIMSS video and SASS is the ability to make comparisons across key variables (countries, states, types of schools, types of teachers). It is not clear how many classrooms would have to be videotaped to make valid cross-school comparisons in SASS, or what the cost of this sample would be.

Listing of NCES Working Papers to Date

Please contact Ruth R. Harris at (202) 219-1831 (ruth_harris@ed.gov)
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Number	Title	Contact
94-01 (July)	Schools and Staffing Survey (SASS) Papers Presented at Meetings of the American Statistical Association	Dan Kasprzyk
94-02 (July)	Generalized Variance Estimate for Schools and Staffing Survey (SASS)	Dan Kasprzyk
94-03 (July)	1991 Schools and Staffing Survey (SASS) Reinterview Response Variance Report	Dan Kasprzyk
94-04 (July)	The Accuracy of Teachers' Self-reports on their Postsecondary Education: Teacher Transcript Study, Schools and Staffing Survey	Dan Kasprzyk
94-05 (July)	Cost-of-Education Differentials Across the States	William Fowler
94-06 (July)	Six Papers on Teachers from the 1990-91 Schools and Staffing Survey and Other Related Surveys	Dan Kasprzyk
94-07 (Nov.)	Data Comparability and Public Policy: New Interest in Public Library Data Papers Presented at Meetings of the American Statistical Association	Carrol Kindel
95-01 (Jan.)	Schools and Staffing Survey: 1994 Papers Presented at the 1994 Meeting of the American Statistical Association	Dan Kasprzyk
95-02 (Jan.)	QED Estimates of the 1990-91 Schools and Staffing Survey: Deriving and Comparing QED School Estimates with CCD Estimates	Dan Kasprzyk
95-03 (Jan.)	Schools and Staffing Survey: 1990-91 SASS Cross-Questionnaire Analysis	Dan Kasprzyk
95-04 (Jan.)	National Education Longitudinal Study of 1988: Second Follow-up Questionnaire Content Areas and Research Issues	Jeffrey Owings
95-05 (Jan.)	National Education Longitudinal Study of 1988: Conducting Trend Analyses of NLS-72, HS&B, and NELS:88 Seniors	Jeffrey Owings

Listing of NCES Working Papers to Date--Continued

Number	Title	Contact
95-06 (Jan.)	National Education Longitudinal Study of 1988: Conducting Cross-Cohort Comparisons Using HS&B, NAEP, and NELS:88 Academic Transcript Data	Jeffrey Owings
95-07 (Jan.)	National Education Longitudinal Study of 1988: Conducting Trend Analyses HS&B and NELS:88 Sophomore Cohort Dropouts	Jeffrey Owings
95-08 (Feb.)	CCD Adjustment to the 1990-91 SASS: A Comparison of Estimates	Dan Kasprzyk
95-09 (Feb.)	The Results of the 1993 Teacher List Validation Study (TLVS)	Dan Kasprzyk
95-10 (Feb.)	The Results of the 1991-92 Teacher Follow-up Survey (TFS) Reinterview and Extensive Reconciliation	Dan Kasprzyk
95-11 (Mar.)	Measuring Instruction, Curriculum Content, and Instructional Resources: The Status of Recent Work	Sharon Bobbitt & John Ralph
95-12 (Mar.)	Rural Education Data User's Guide	Samuel Peng
95-13 (Mar.)	Assessing Students with Disabilities and Limited English Proficiency	James Houser
95-14 (Mar.)	Empirical Evaluation of Social, Psychological, & Educational Construct Variables Used in NCES Surveys	Samuel Peng
95-15 (Apr.)	Classroom Instructional Processes: A Review of Existing Measurement Approaches and Their Applicability for the Teacher Follow-up Survey	Sharon Bobbitt
95-16 (Apr.)	Intersurvey Consistency in NCES Private School Surveys	Steven Kaufman
95-17 (May)	Estimates of Expenditures for Private K-12 Schools	Stephen Broughman
95-18 (Nov.)	An Agenda for Research on Teachers and Schools: Revisiting NCES' Schools and Staffing Survey	Dan Kasprzyk
96-01 (Jan.)	Methodological Issues in the Study of Teachers' Careers: Critical Features of a Truly Longitudinal Study	Dan Kasprzyk

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Number	Title	Contact
96-02 (Feb.)	Schools and Staffing Survey (SASS): 1995 Selected papers presented at the 1995 Meeting of the American Statistical Association	Dan Kasprzyk
96-03 (Feb.)	National Education Longitudinal Study of 1988 (NELS:88) Research Framework and Issues	Jeffrey Owings
96-04 (Feb.)	Census Mapping Project/School District Data Book	Tai Phan
96-05 (Feb.)	Cognitive Research on the Teacher Listing Form for the Schools and Staffing Survey	Dan Kasprzyk
96-06 (Mar.)	The Schools and Staffing Survey (SASS) for 1998-99: Design Recommendations to Inform Broad Education Policy	Dan Kasprzyk
96-07 (Mar.)	Should SASS Measure Instructional Processes and Teacher Effectiveness?	Dan Kasprzyk
96-08 (Apr.)	How Accurate are Teacher Judgments of Students' Academic Performance?	Jerry West
96-09 (Apr.)	Making Data Relevant for Policy Discussions: Redesigning the School Administrator Questionnaire for the 1998-99 SASS	Dan Kasprzyk
96-10 (Apr.)	1998-99 Schools and Staffing Survey: Issues Related to Survey Depth	Dan Kasprzyk
96-11 (June)	Towards an Organizational Database on America's Schools: A Proposal for the Future of SASS, with comments on School Reform, Governance, and Finance	Dan Kasprzyk
96-12 (June)	Predictors of Retention, Transfer, and Attrition of Special and General Education Teachers: Data from the 1989 Teacher Followup Survey	Dan Kasprzyk
96-13 (June)	Estimation of Response Bias in the NHES:95 Adult Education Survey	Steven Kaufman
96-14 (June)	The 1995 National Household Education Survey: Reinterview Results for the Adult Education Component	Steven Kaufman

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Number	Title	Contact
96-15 (June)	Nested Structures: District-Level Data in the Schools and Staffing Survey	Dan Kasprzyk
96-16 (June)	Strategies for Collecting Finance Data from Private Schools	Stephen Broughman
96-17 (July)	National Postsecondary Student Aid Study: 1996 Field Test Methodology Report	Andrew G. Malizio
96-18 (Aug.)	Assessment of Social Competence, Adaptive Behaviors, and Approaches to Learning with Young Children	Jerry West
96-19 (Oct.)	Assessment and Analysis of School-Level Expenditures	William Fowler
96-20 (Oct.)	1991 National Household Education Survey (NHES:91) Questionnaires: Screener, Early Childhood Education, and Adult Education	Kathryn Chandler
96-21 (Oct.)	1993 National Household Education Survey (NHES:93) Questionnaires: Screener, School Readiness, and School Safety and Discipline	Kathryn Chandler
96-22 (Oct.)	1995 National Household Education Survey (NHES:95) Questionnaires: Screener, Early Childhood Program Participation, and Adult Education	Kathryn Chandler
96-23 (Oct.)	Linking Student Data to SASS: Why, When, How	Dan Kasprzyk
96-24 (Oct.)	National Assessments of Teacher Quality	Dan Kasprzyk
96-25 (Oct.)	Measures of Inservice Professional Development: Suggested Items for the 1998-1999 Schools and Staffing Survey	Dan Kasprzyk
96-26 (Nov.)	Improving the Coverage of Private Elementary-Secondary Schools	Steven Kaufman
96-27 (Nov.)	Intersurvey Consistency in NCES Private School Surveys for 1993-94	Steven Kaufman

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Number	Title	Contact
96-28 (Nov.)	Student Learning, Teaching Quality, and Professional Development: Theoretical Linkages, Current Measurement, and Recommendations for Future Data Collection	Mary Rollefson
96-29 (Nov.)	Undercoverage Bias in Estimates of Characteristics of Adults and 0- to 2-Year-Olds in the 1995 National Household Education Survey (NHES:95)	Kathryn Chandler
96-30 (Dec.)	Comparison of Estimates from the 1995 National Household Education Survey (NHES:95)	Kathryn Chandler
97-01 (Feb.)	Selected Papers on Education Surveys: Papers Presented at the 1996 Meeting of the American Statistical Association	Dan Kasprzyk
97-02 (Feb.)	Telephone Coverage Bias and Recorded Interviews in the 1993 National Household Education Survey (NHES:93)	Kathryn Chandler
97-03 (Feb.)	1991 and 1995 National Household Education Survey Questionnaires: NHES:91 Screener, NHES:91 Adult Education, NHES:95 Basic Screener, and NHES:95 Adult Education	Kathryn Chandler
97-04 (Feb.)	Design, Data Collection, Monitoring, Interview Administration Time, and Data Editing in the 1993 National Household Education Survey (NHES:93)	Kathryn Chandler
97-05 (Feb.)	Unit and Item Response, Weighting, and Imputation Procedures in the 1993 National Household Education Survey (NHES:93)	Kathryn Chandler
97-06 (Feb.)	Unit and Item Response, Weighting, and Imputation Procedures in the 1995 National Household Education Survey (NHES:95)	Kathryn Chandler
97-07 (Mar.)	The Determinants of Per-Pupil Expenditures in Private Elementary and Secondary Schools: An Exploratory Analysis	Stephen Broughman
97-08 (Mar.)	Design, Data Collection, Interview Timing, and Data Editing in the 1995 National Household Education Survey	Kathryn Chandler

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Number	Title	Contact
97-09 (Apr.)	Status of Data on Crime and Violence in Schools: Final Report	Lee Hoffman
97-10 (Apr.)	Report of Cognitive Research on the Public and Private School Teacher Questionnaires for the Schools and Staffing Survey 1993-94 School Year	Dan Kasprzyk
97-11 (Apr.)	International Comparisons of Inservice Professional Development	Dan Kasprzyk
97-12 (Apr.)	Measuring School Reform: Recommendations for Future SASS Data Collection	Mary Rollefson
97-13 (Apr.)	Improving Data Quality in NCES: Database-to-Report Process	Susan Ahmed
97-14 (Apr.)	Optimal Choice of Periodicities for the Schools and Staffing Survey: Modeling and Analysis	Steven Kaufman
97-15 (May)	Customer Service Survey: Common Core of Data Coordinators	Lee Hoffman
97-16 (May)	International Education Expenditure Comparability Study: Final Report, Volume I	Shelley Burns
97-17 (May)	International Education Expenditure Comparability Study: Final Report, Volume II, Quantitative Analysis of Expenditure Comparability	Shelley Burns
97-18 (June)	Improving the Mail Return Rates of SASS Surveys: A Review of the Literature	Steven Kaufman
97-19 (June)	National Household Education Survey of 1995: Adult Education Course Coding Manual	Peter Stowe
97-20 (June)	National Household Education Survey of 1995: Adult Education Course Code Merge Files User's Guide	Peter Stowe
97-21 (June)	Statistics for Policymakers or Everything You Wanted to Know About Statistics But Thought You Could Never Understand	Susan Ahmed
97-22 (July)	Collection of Private School Finance Data: Development of a Questionnaire	Stephen Broughman

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Number	Title	Contact
97-23 (July)	Further Cognitive Research on the Schools and Staffing Survey (SASS) Teacher Listing Form	Dan Kasprzyk
97-24 (Aug.)	Formulating a Design for the ECLS: A Review of Longitudinal Studies	Jerry West
97-25 (Aug.)	1996 National Household Education Survey (NHES:96) Questionnaires: Screener/Household and Library, Parent and Family Involvement in Education and Civic Involvement, Youth Civic Involvement, and Adult Civic Involvement	Kathryn Chandler
97-26 (Oct.)	Strategies for Improving Accuracy of Postsecondary Faculty Lists	Linda Zimbler
97-27 (Oct.)	Pilot Test of IPEDS Finance Survey	Peter Stowe
97-28 (Oct.)	Comparison of Estimates in the 1996 National Household Education Survey	Kathryn Chandler
97-29 (Oct.)	Can State Assessment Data be Used to Reduce State NAEP Sample Sizes?	Steven Gorman
97-30 (Oct.)	ACT's NAEP Redesign Project: Assessment Design is the Key to Useful and Stable Assessment Results	Steven Gorman
97-31 (Oct.)	NAEP Reconfigured: An Integrated Redesign of the National Assessment of Educational Progress	Steven Gorman
97-32 (Oct.)	Innovative Solutions to Intractable Large Scale Assessment (Problem 2: Background Questionnaires)	Steven Gorman
97-33 (Oct.)	Adult Literacy: An International Perspective	Marilyn Binkley
97-34 (Oct.)	Comparison of Estimates from the 1993 National Household Education Survey	Kathryn Chandler
97-35 (Oct.)	Design, Data Collection, Interview Administration Time, and Data Editing in the 1996 National Household Education Survey	Kathryn Chandler
97-36 (Oct.)	Measuring the Quality of Program Environments in Head Start and Other Early Childhood Programs: A Review and Recommendations for Future Research	Jerry West

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Number	Title	Contact
97-37 (Nov.)	Optimal Rating Procedures and Methodology for NAEP Open-ended Items	Steven Gorman
97-38 (Nov.)	Reinterview Results for the Parent and Youth Components of the 1996 National Household Education Survey	Kathryn Chandler
97-39 (Nov.)	Undercoverage Bias in Estimates of Characteristics of Households and Adults in the 1996 National Household Education Survey	Kathryn Chandler
97-40 (Nov.)	Unit and Item Response Rates, Weighting, and Imputation Procedures in the 1996 National Household Education Survey	Kathryn Chandler
97-41 (Dec.)	Selected Papers on the Schools and Staffing Survey: Papers Presented at the 1997 Meeting of the American Statistical Association	Steve Kaufman
97-42 (Jan. 1998)	Improving the Measurement of Staffing Resources at the School Level: The Development of Recommendations for NCES for the Schools and Staffing Survey (SASS)	Mary Rollefson
97-43 (Dec.)	Measuring Inflation in Public School Costs	William J. Fowler, Jr.
97-44 (Dec.)	Development of a SASS 1993-94 School-Level Student Achievement Subfile: Using State Assessments and State NAEP, Feasibility Study	Michael Ross
98-01 (Jan.)	Collection of Public School Expenditure Data: Development of a Questionnaire	Stephen Broughman
98-02 (Jan.)	Response Variance in the 1993-94 Schools and Staffing Survey: A Reinterview Report	Steven Kaufman
98-03 (Feb.)	Adult Education in the 1990s: A Report on the 1991 National Household Education Survey	Peter Stowe
98-04 (Feb.)	Geographic Variations in Public Schools' Costs	William J. Fowler, Jr.

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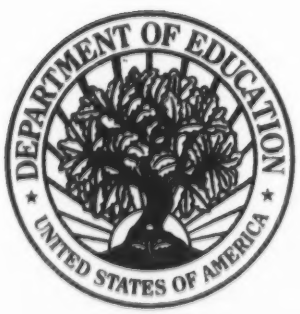
Number	Title	Contact
98-05 (Mar.)	SASS Documentation: 1993-94 SASS Student Sampling Problems; Solutions for Determining the Numerators for the SASS Private School (3B) Second-Stage Factors	Steven Kaufman
98-06 (May)	National Education Longitudinal Study of 1988 (NELS:88) Base Year through Second Follow-Up: Final Methodology Report	Ralph Lee
98-07 (May)	Decennial Census School District Project Planning Report	Tai Phan
98-08 (July)	The Redesign of the Schools and Staffing Survey for 1999-2000: A Position Paper	Dan Kasprzyk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